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ABSTRACT

While the process view of communication has been widely advocated by respected scholars in the field, this perspective does not characterize current practices in the teaching of speech communication. Many pedagogical practices in speech communication have remained unchanged for 50 years; however, the past decade has seen the development of a trend to specify the outcome of speech communication instruction in behavioral terms. The formulation and implementation of behavioral objectives requires the adoption of the behaviorist perspective. The behavioral view of stimulus and response, cause and effect, and independent and dependent variables provides the underlying rationale for the notion of behavioral objectives and clearly places this approach to communication education in the archaic realm of causal determinism. While maintaining that the statement of the objectives is a needed and necessary task of any teacher for the purposes of classroom organization and accountability, the statement of the objective in behavioral terms is inappropriate for the teaching of much of the content of the communication discipline. (Author/WR)

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BEHAVIORAL OBJECTIVES AND THE NOTION OF PROCESS IN SPEECH
COMMUNICATION: A CONFLICT OF PARADIGMS

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ABSTRACT

BEHAVIORAL OBJECTIVES AND THE NOTION OF PROCESS IN SPEECH COMMUNICATION: A CONFLICT OF PARADIGMS

While the process view of communication has been widely advocated by respected scholars in the field, this perspective does not characterize current practices in the teaching of speech communication. Many pedagogical practices in speech communication have remained unchanged for fifty years, however the past decade has seen the development of a trend to specify the outcome of speech communication instruction in behavioral terms. The purpose of this paper is to demonstrate that a process view of communication is in direct and irreconcilable conflict with the specification of behavioral objectives for speech communication instruction.

It has recently been suggested that while communication scientists subscribe to the process paradigm in theory, this perspective is not evident in much of our research. The same can be said to characterize the teaching in the field. While espousing process, we continue to utilize the perspective which process has replaced, i.e., the view of Newton, Descartes and Kant.

The formulation and implementation of behavioral objectives requires the adoption of the behaviorist perspective. The behavioral view of stimulus and response, cause and effect, and independent and dependent variables provides the underlying rationale for the notion of behavioral objectives and clearly places this approach to communication education in the archaic realm of causal determinism. Many scientists have rejected this perspective and its two related primary premises: that the whole is the sum of its parts and causality the only unifying order. Our discipline, however, demonstrates its lack of understanding of the process paradigm by adopting teaching methods which fly in the face of our subject material.

While maintaining that the statement of the objectives is a needed and necessary task of any teacher for the purposes of classroom organization and accountability, it is concluded that the statement of objectives in behavioral terms is inappropriate for the teaching of much of the content of the communication discipline.

Previous debate concerning behavioral objectives has been largely trivial and superficial, on the order of value judgments rationalized after the fact in scientific terminology. Because behavioral objectives represent a new wrinkle in the teaching of speech communication, a discipline in which many pedagogical practices have remained unchanged in fifty years, dissenters to the behavioral objectives doctrine have thus far been characterized as conservatives resisting the inevitable course of the future. Defenders, however, as ideologues, come off no better. This is best exemplified in Popham's summary of the ongoing debate in which he, in defending behavioral objectives, engages in downright name calling. "Their particular form of sin (opposing the use of behavioral objectives) is more dangerous than some of the time-honored perversions of civilized societies. For example, it will probably harm more people than the most exotic forms of pronography."¹

Such pettiness, which infects both opposers and defenders of behavioral objectives, can be rationalized by viewing it as symptomatic of a classic conflict in paradigms as explained by Kuhn.² However, as long as debate remains

in the trivial ideological sphere, there is no hope that the argument can approach resolution.

There is, however, another approach. This approach requires that we look to the scientific assumptions underlying the advocacy of the use of behavioral objectives and compare these assumptions with those of current communication theory. If these sets of assumptions are found to be consistent, the use of behavioral objectives would appear to be defensible. Should they be found inconsistent, however, either behavioral objectives or communication theory must be reevaluated. Based on the relative hierarchical scientific status of these two constructs, one would logically reevaluate the former. This intellectual process fits what Reichenbach calls "scientific philosophy" as opposed to mere speculation.³ It is offered here in the spirit of moving beyond trivial ideology.

Given that the behavior objective debate has not achieved the level of the analysis of assumptions, it is not surprising that these assumptions relevant to the use of BO's, have not been previously delineated. Consequently, it becomes necessary to glean them from the existing literature on behavioral objectives.

ASSUMPTIONS UNDERLYING BEHAVIORAL OBJECTIVES

The scientific assumptions underlying the use of behavioral objectives can be states as follows:

- I. Complex learning behavior can be broken down into component parts, and conversely, that the sum of these components are equal to the complex whole of which they are a part.
- II. Learning behavior is directly or indirectly observable and, thus, can be directly or indirectly measured with some degree of reliability and validity.
- III. Student learning can be attributed to the effect of specific stimulus variables; that is, student behaviors representative of learning can be considered to be caused by teacher behaviors representative of instructions.

Kibler, Barker and Miles demonstrate the first assumption in their discussion of behavioral analysis. They refer to "final behavior to be required of the student broken down into its component parts."⁴

Their concern for standards⁵ and Briggs' concern for testing are indicative of the second assumption above.⁶

The third assumption is more or less implicit in the behavioral objective literature, but is implied in terms of classroom behavior prescribed by instructional methods suggested by the use of behavioral objectives.

The assumptions underlying behavioral objectives should not appear alien to the reader. They are the same assumptions that underlie operant conditioning, behavioral psychology, and indeed, these assumptions in no way differ from the assumptions underlying what we have come to consider to be traditional educational philosophy and methods. Consequently, it is not surprising that behavioral objective instructional strategies were first extensively adopted by such traditionally oriented societal institutions as the military and industry.

Educators, on the other hand, have been in many cases inarticulately resistant to behavioral objectives. This can be explained by educational movements away from the traditional assumptions and toward an educational perspective implying a new set of assumptions of which individual teachers may or may not be aware. Behavioral

objectives are rejected not as something inherently new, and therefore threatening, but as a variation of an old, and perhaps antiquated, educational theme.

But if behavioral objectives represent the old assumptions rather than the new, what is the new? This is where communication theory comes in.

COMMUNICATION THEORY

In the early days of the emerging communication discipline, communication scholars typically adopted a model of human behavior based on the scientific assumptions of psychologists of the behavioral school. This perspective included notions of stimulus and response, cause and effect, isolable independent and dependent variables and reductionism. Though he did not intend it as such, this model found graphic form in Shannon's mathematical model of communication.

More recent communication scientists, however, influenced by the perspective of cybernetics⁷ and by cultural anthropologists like Birdwhistell and Hall studying nonverbal communication,⁸ have rapidly realized that such a model is inadequate to explain the diverse phenomena studied in the discipline, including artistic production,

interpersonal and small group communication, and what has come to be called mass communication "effects." Through the direct and indirect influence of Cooley, G. H. Mead, Sapir, Whorf, Linton, Cassirer, Heider, Morton, and more recently, Schramm, De Fleur, Gerbner, M. Mead, Lasswell, Westley and MacLean, Barnlund, Bateson, Cherry, Goffman, and others, communication is now typically discussed as "dynamic" and in terms of "process."⁹

While adopting the new terminology, however, many members of the communication discipline failed, and still fail, to make the necessary corresponding shift in perspective. As Brooks and Scheidel point out, "While most theoretical writings emphasize the dynamic nature of communication, in practice the bulk of research on influence through speech imposes a static view."¹⁰ Smith, in expanding on this situation, particularly faults Berlo and Miller on these grounds.¹¹ Despite these problems, which are a function of the improper application of certain assumptions, current communication theory can be said to reflect a process point of view.

ASSUMPTIONS OF PROCESS PERSPECTIVE

This process perspective is based on three basic assumptions:

- I. Nature consists of elements that are inseparable from all other elements.
- II. Cause and effect cannot be assigned in that events can have no beginning nor end and include a functionally infinite number of variables.
- III. While measurement of certain types is possible, inferences as to what is being measured and what measurement means is a question of perspective, and consequently, differing explanations can be simultaneously acceptable. Events can only be understood in context.

The inconsistency of the scientific assumptions of behavioral objectives and those of communication theory are immediately obvious. In one case, it is claimed that behavior can be broken down; in the other, that elements are inseparable. In one case, variables can be isolated, in the other they cannot. But this is only the beginning. Further and deeper comparison would reveal that behavioral

objectives and communication theory are located in separate universes.

These inconsistencies are not surprising, nor is the metaphor of "separate universes" an idle one. The perspective of advocates of behavioral objectives and those of early communications scientists are each based on the perspective of the behavioral psychologist, heir of J. B. Watson, whose perspective was in turn borrowed from the most respected science of his day, the mechanical precision of Newtonian physics. But as Smith points out,

The irony of all this was, of course, that it was at precisely the same time when Watson was enlisting converts to his new scientific psychology that the science on which that psychology was modeled was rejecting the underlying principles of the model. Planck, Einstein, Bohr, Heisenberg and others were constructing a physics which is indeterminate . . . which rejects even the old notion of matter.¹²

While the inconsistency between behavior objectives and communication theory might be ascribed to the acceptance or rejection of the perspective of the behavioral psychologist, we can now see that the problem is even deeper, for this perspective and its assumptions are in turn based upon the perspective and assumptions of a Newtonian universe; that is, that the whole is the sum of

its parts and causality the only unifying order, that behavior (physical, social or otherwise) operates in terms of causality. The behavioral stimulus-response model is merely the translation of the assumption of cause and effect into the language of the behavioral scientist. And as Psychology Today, edited by T. George Harris notes, "In the studies of man, the brighter researchers now work on phenomena that do not fit the mechanical models they borrowed from the dogmas of classical physics and chemistry."¹³

In opposition to this notion of causality, however, is A. N. Whitehead's notion of process.¹⁴ Whitehead set down the assumptions of the process perspective in 1927-1928 and in so doing, placed Einsteinian relativity, Gibbsian contingency, Freudian irrationality, quantum theory, indeed a new universe, in philosophical perspective.

The inconsistency between behavioral objectives and communication theory can be seen as a function of a full blown scientific revolution and the time lag associated with the invisible dissemination and acceptance of the revolution. Other examples can be seen throughout the scientific world (such as physical field theory, the lack

of symmetry of action between phi currents and phi magnets, and the Michelson-Morley experiments); and increasingly in the lay world as well (such as debates on the responsibility for criminality, or the advent of national economic policies). Consequently, while a teacher in his classroom may not know why, his gut reaction against behavioral objectives may have very sound scientific philosophical roots.

Advocates of behavioral objectives in the 1960's and 1970's may be seen in retrospect to be like the behavioral psychologists of the 1920's, discovering a universe that is no more. Communication is the essential component of learning. Indeed, the words can be used interchangeably. Instructional models and methodologies, if they are to facilitate learning, must be consistent with what we know about the communication process. Behavioral objectives fail in this regard. They assume a universe, at least the universe of the classroom, where lineal control is possible. But as Bateson has pointed out, "We do not live in the sort of universe in which simple lineal control is possible. Life is not like that."¹⁵ Of course, the behavioral perspective retains usefulness in certain situations as

demonstrated by the successful use of behavior modification programs; for examples, just as the laws of Newton retain a certain usefulness in an Einsteinian universe.

COMMUNICATION EDUCATION

For those of us who teach communication, whether our subject area be public address, oral interpretation, writing, interpersonal communication, group dynamics or mass communication research, the adoption of behavioral objectives is doubly damning. The formation and implementation of behavioral objectives requires the implicit adoption of the behavioral perspective in opposition to the process perspective on which communication theory is based. Such teaching methods fly in the face of much of our subject material.

Any argument for or against behavioral objectives must be based on a tripod of practical considerations, empirical evidence and philosophical rationale. A review of empirical studies of the effects of behavioral objectives finds the empirical evidence to be equivocal.¹⁶ The philosophical rationale, considering the status of the scientific assumptions of behavioral objectives, clearly opposes their use.

Practical arguments for the use of behavioral objectives, such as their usefulness in organizing and managing work, cannot be denied. The practical benefits, however, are a function not of the behavioral perspective, but of the nature of objectives.

The statement of objectives is a needed and necessary task of any teacher for the purposes of classroom organization and accountability. However, in that the statement of objectives in behavioral terms is in opposition to the assumptions of contemporary communication theory, such a practice must be considered at best inappropriate in the teaching of communication, if not all subjects. At worst, behavioral objectives are the product of an already archaic educational system and tend to sustain that system in opposition to efforts toward reform.

NOTES

NOTES

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³Hans Reichenbach, The Rise of Scientific Philosophy (Berkeley: University of California Press, 1951).

⁴Robert J. Kibler, Larry L. Barker, and David T. Miles, Behavioral Objectives and Instruction (Boston: Allyn and Bacon, Inc., 1970), pp. 31-32.

⁵Ibid., pp. 38-41.

⁶Leslie J. Briggs, Handbook of Procedures for the Design of Instruction (Pittsburgh: American Institutes for Research, 1970), pp. 46-72.

⁷Gregory Bateson, Steps to an Ecology of Mind (New York: Ballantine Books, 1972), pp. 399-410; Norbert Wiener, The Human Use of Human Beings (New York: Avon Books, 1967), particularly Chapters 1, 2, 3, 5 and 11.

⁸Ray L. Birdwhistell, Kinetics and Context (Philadelphia: University of Pennsylvania Press, 1970); E. T. Hall, The Silent Language (New York: Doubleday, 1959).

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¹⁰Robert D. Brooks and Thomas M. Scheidel, "Speech As Process: Case Study," Speech Monographs (March 1968) Vol. XXXV, No. 1.

¹¹David H. Smith, "Communication Research and the Idea of Process," Speech Monographs (August 1972), Vol. XXXIX, No. 3

¹²Ibid., pp. 177-178.

¹³T. George Harris, "Pucker Up For Certainty," Psychology Today (April 1974), Vol. 7, No. 11, p. 34.

¹⁴Alfred North Whitehead, Process and Reality (New York: MacMillan, 1929).

¹⁵Bateson, op. cit.

¹⁶P. Duchastel and P. Morrill, "The Effects of Behavioral Objectives on Learning: A Review of Empirical Studies," Review of Educational Research, 1973.